



# UNITED STATES PATENT AND TRADEMARK OFFICE

YR  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,541	03/29/2004	Mark Aston	16515/95349-01	5305
7590	09/12/2006			EXAMINER SANEI, HANA ASMAT
Jones, Walker, Waechter, Poitevent, Carrere & Dengre, L.L.P. 4th Floor 8555 United Plaza Boulevard Baton Rouge, LA 70809			ART UNIT 2879	PAPER NUMBER
DATE MAILED: 09/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/813,541	ASTON, MARK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hana A. Sanei	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 23 June 2006.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2 and 4-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 28 and 29 is/are allowed.
- 6) Claim(s) 1 is/are rejected.
- 7) Claim(s) 2 and 4-27 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 March 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. 10/026,919.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

The Amendment, filed on 6/16/06, has been entered and acknowledged by the Examiner.

Cancellation of claim 3 has been entered.

Claims 1-2, 4-29 are pending in the instant application

### ***Priority***

Applicant is reminded that in order for a patent issuing on the instant application to obtain the benefit of priority based on priority papers filed in parent Application No. 10/026919 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be timely made in this application. To satisfy the requirement of 37 CFR 1.55(a)(2) for a certified copy of the foreign application, applicant may simply identify the application containing the certified copy.

Applicant does not receive the filing date of the continuation in part application 10/026919 as, after being reviewed by Examiner, the subject matter of the claims in the present applicant 10/813541 are not disclosed in the specification of it's parent case 10/026919. If Applicant disagrees, Examiner invites applicant to indicate where in the specification the current invention is disclosed.

### ***Claim Objections***

New and amended Claims 28-29 are objected to because of the following informalities: That applicant introduces a nonzero horizontal angle in addition to the nonzero vertical angle, Examiner is unclear as to the limitation directed to a "two

dimensional" display as there is now a rotation (with varying nonzero horizontal angle  $\theta_h$ ) and not only a vertical angle. Examiner questions that perhaps applicant intended to depict a "three dimensional" display. It seems contradictory, wherein the "two dimensional" reinstates one of the vertical or horizontal as being zero. In addition, to describe a "display" is to describe an tangible object in space, thereby mandating a "three dimensional" object as all objects are inherently "three dimensional" by an x,y,z coordinate system. For purposes of examining, Examiner will assume applicant intended to describe a "three dimensional" display. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bayrle et al (US 2002/0118320 A1).

Regarding Claim 1, Bayrle teaches a plurality of display tiles (2, see at least Figs. 1-4), each tile (2) comprising a portion (overlap zone, 3 & distance "d" Fig. 4) to support a display region incorporating an organic light emitting device (OLED, 30 of Fig. 5; [0027]-[0028]) material with a plurality of separately addressable pixel elements (individually controllable pixels 12, Fig. 2), wherein the portion is at a tilt angle  $\theta_c$  of less than 12° (angle, [0034]) to the main plane of the display, wherein:  $\theta_c = \tan^{-1}[(\sqrt{l^2+w^2})/3t]$ ; l being the tile length, w being the tile width and t being the tile thickness

(refer to Fig. 7). It should be noted that the horizontal tilt angle  $\theta_h$  in this case is set to zero, thereby equating the vertical tilt angle  $\theta_v$  identically equal to the compound tilt angle  $\theta_c$ .

***Allowable Subject Matter***

A. Claims 2, 4-27 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a display comprising a plurality of display tiles, each tile comprising a portion to support a display region incorporating an Organic Light Emitting Device (hereinafter referred to as OLED) material with a plurality of separately addressable pixel elements, wherein the portion is at a tilt angle  $\theta_c$  of less than 12° to the main plane of the display, wherein:  $\theta_c = \tan^{-1} [(\sqrt{l^2 + w^2})/ 3t]$ , l being the tile length, w being the tile width and t being the tile thickness, the compound angle having a nonzero vertical tilt angle  $\theta_v$ .

However, the prior art of record neither shows nor suggests the compound angle  $\theta_c$  further having a nonzero horizontal tilt angle  $\theta_h$  as set forth in Claim 2.

Claim 4-27 are objected to because of their dependency status from claim 2.

B. Claim 28 is allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a display comprising a plurality of display tiles, each of said display tiles further including: a. a support member; b. a printed circuit

board positioned on said support member; c. a panel having an OLED element operatively connected to said circuit board at a compound tilt angle  $\theta_c$  to the main plane of the display for the printed circuit board to underlie part of another tile, the compound tilt angle  $\theta_c$  comprising a non zero vertical tilt angle  $\theta_v$ ; and d. wherein said display tiles are positioned in an overlapping array to form a substantially three-dimensional display.

However, the prior art of record neither shows nor suggests the compound tilt angle  $\theta_c$  further comprising a nonzero horizontal tilt angle  $\theta_h$  as set forth in Claim 28.

C. Claim 29 is allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

The prior art of record teaches a display comprising a plurality of display tiles, each of said display tiles further including: a. a support member; b. a an OLED element operatively connected to said support member at a compound tilt angle  $\theta_c$  to the main plane of the display, the compound tilt angle  $\theta_c$  comprising a non zero vertical tilt angle  $\theta_v$ ; and d. wherein said display tiles are positioned in an overlapping array to form a substantially three-dimensional display. However, the prior art of record neither shows nor suggests the compound tilt angle  $\theta_c$  further comprising a nonzero horizontal tilt angle  $\theta_h$  as set forth in Claim 29.

#### ***Response to Arguments***

Examiner finds Applicants arguments with respect to the 35 USC 112 rejection made to be persuasive, as such the rejection withdrawn.

Applicant's arguments filed on 6/16/06 have been fully considered but they are not persuasive.

In response to Applicant's arguments that Bayrle et al (US 2002/0118320 A1) does not disclose a display comprising a plurality of display tiles, each tile comprising a portion to support a display region incorporating an Organic Light Emitting Device (OLED) material with a plurality of separately addressable pixel elements the Examiner respectfully disagrees.

The Examiner openly agrees with Applicant's assertion that Bayrle does not teach the OLEDs are separately addressable and are simply present as a means to compensate for residual shadowing produced by backlighting. However, the language employed to describe the Applicant's invention does not clearly recite strictly OLED tile, the OLED tiles themselves being the novel invention. By utilizing the broad language of "incorporating," applicant leaves the interpretation of the claim to be vague. For this reason, Examiner may reasonably read an LCD display, that which "incorporates" organic light emitting **material**, the LCD display **tiles** provided with a plurality of separately addressable pixel elements. Examiner suggests Applicant more clearly describe the locality and positioning of each and every element claimed, so as to eradicate any ambiguity thereof. Accordingly, the limitation of a display comprising a plurality of display tiles, each tile comprising a portion to support a display region incorporating an Organic Light Emitting Device (OLED) material with a plurality of separately addressable pixel elements is disclosed by Bayrle's teaching, which falls within applicant's claimed invention.

For the reasons stated above, the rejection of the claim is deemed proper.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hana A. Sanei whose telephone number is (571) 272-8654. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

XAS

Hana A. Sanei  
Examiner

  
**Joseph Williams**  
**Primary Examiner**